

REMARKS

Claims 1, 2, 5, 7-10, and 13 are pending in the present application. Claims 3, 4, 6, 11, 12, 14, and 15 have been cancelled without prejudice or disclaimer to the subject matter contained therein.

A. Rejection under 35 U.S.C. §103 over Dattilo in view of Mestha

Claims 1-15 have been rejected under 35 U.S.C. §103 as being unpatentable over Datillo (US-A-5,293,258) in view of Mestha (US-A-6,157,469). This rejection under 35 U.S.C. §103 is respectfully traversed.

In formulating the rejection under 35 U.S.C. §103, the Examiner alleges that Datillo discloses a scanner and an output device. However, the Examiner recognizes that Datillo discloses an image processing system for providing color drift correction. To meet this deficiency in Datillo, the Examiner proposes to modify the teachings of Datillo with the teachings of Mestha. The Examiner alleges that Mestha discloses an image processing system for providing color drift correction. From these allegations, the Examiner concludes that one of ordinary skill in the art would find the presently claimed invention obvious in view of the teachings of Datillo and Mestha. This position and conclusion by the Examiner are respectfully traversed in view of the above amendments.

1. Independent Claim 1

As submitted above, amended independent claim 1 is directed to a color reproduction system with drift correction. The system claimed includes an output device having a set of tone reproduction compensation curves for rendering an image on a recording medium, the output device generating, using the set of tone reproduction compensation curves, an output document having a plurality of color test patches; a scanner for scanning the output document having the plurality of color test patches to generate scanned image data representative of the plurality of color test patches, the scanned image data providing a color representation of the plurality of color test patches; and an image processing system receiving the scanned image data and generating print ready data. The claimed image processing system device includes a

calibration target generator to generate, from a set of digital signals, a calibration target, to be printed, representing a plurality of color test patches; a calibration conversion processor to convert the scanned image data into a set of device independent color signals; a calibration processor for computing a set of color shift correction signals by comparing the set of device independent color signals with a set of desired color signals; and an adjustment processor to re-calculate a set of tone reproduction compensation curves in response to the color shift correction signals and to cause the re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in the output device.

As recognized by the Examiner, Datillo fails to teach an image processing system device including a calibration target generator to generate, from a set of digital signals, a calibration target, to be printed, representing a plurality of color test patches; a calibration conversion processor to convert the scanned image data into a set of device independent color signals; a calibration processor for computing a set of color shift correction signals by comparing the set of device independent color signals with a set of desired color signals; and an adjustment processor to re-calculate a set of tone reproduction compensation curves in response to the color shift correction signals and to cause the re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in the output device.

With respect to Mestha, Mestha teaches a calibration system that establishes a relationship between the target colors in device independent space and the target colors in drift space. Contrary to the Examiner's assertions, Mestha fails to teach re-calculating a set of tone reproduction compensation curves in response to the color shift correction signals and causing the re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in the output device.

More specifically, Mestha teaches, at column 5, lines 46-56, that the color data used in the calibration process is linearized by a tone reproduction curve. Moreover, Mestha teaches, at column 1, lines 42-64, that the tone reproduction curves are determined at the time of manufacturing. Mestha fails to teach re-calculating the set of

tone reproduction compensation curves in response to the color shift correction signals, as set forth by amended independent claim 1.

Therefore, since both Datillo (the Examiner's admission) and Mestha singly fail to teach or suggest re-calculating a set of tone reproduction compensation curves in response to the color shift correction signals and causing the re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in the output device, the proposed combination of Datillo and Mestha fails to teach or suggest re-calculating a set of tone reproduction compensation curves in response to the color shift correction signals and causing the re-calculated set of tone reproduction compensation curves to replace the set of tone reproduction compensation curves in the output device as set forth by amended independent claim 1.

2. Independent Claim 9

As submitted above, amended independent claim 9 is directed to a method of maintaining the reproduction properties of a color reprographic device. The claimed method causes the color reprographic device to print a copy of a stored test pattern containing a plurality of colored patches; scans the printed target with a scanner to obtain a first set of color signals; processes the first set of color signals to obtain an average device dependent color value for each patch in the test target; converts the average values using a color conversion processor to obtain a device independent color value for each patch in the test target; compares the device independent color values to a stored set of standard values to generate a set of color shift correction signals; re-calculates a set of tone reproduction compensation curves in response to the set of color shift correction signals; and replaces a set of tone reproduction compensation curves in the color reprographic device with the re-calculated set of tone reproduction compensation curves.

As recognized by the Examiner, Mestha fails to teach scanning the printed target with a scanner to obtain a first set of color signals; processes the first set of color signals to obtain an average device dependent color value for each patch in the test target; converting the average values using a color conversion processor to obtain a

device independent color value for each patch in the test target; and comparing the device independent color values to a stored set of standard values to generate a set of color shift correction signals.

With respect to Datillo, Datillo teaches a system that corrects the dynamic range of the color values using a look-up table. Contrary to the Examiner's assertions, Datillo fails to teach re-calculating a set of tone reproduction compensation curves in response to the set of color shift correction signals and replacing a set of tone reproduction compensation curves in the color reprographic device with the re-calculated set of tone reproduction compensation curves, as set forth by amended independent claim 9.

Therefore, since both Mestha (the Examiner's admission) and Datillo singly fail to teach or suggest re-calculating a set of tone reproduction compensation curves in response to the set of color shift correction signals and replacing a set of tone reproduction compensation curves in the color reprographic device with the re-calculated set of tone reproduction compensation curves, the proposed combination of Mestha and Datillo fails to teach or suggest re-calculating a set of tone reproduction compensation curves in response to the set of color shift correction signals and replacing a set of tone reproduction compensation curves in the color reprographic device with the re-calculated set of tone reproduction compensation curves, as set forth by amended independent claim 9.

Dependent Claims

With respect to dependent claims 2, 5, 7, 8, 10, and 13, the Applicant, for the sake of brevity, will not address the reasons supporting patentability for these individual dependent claims, as these claims depend directly or indirectly from allowable independent claims 1 and 9. The Applicant reserves the right to address the patentability of these dependent claims at a later time, should it be necessary.

Accordingly, in view of the amendments and remarks set forth above, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. §103.

CONCLUSION

Accordingly, in view of the amendments and all the reasons set forth above, the Examiner is respectfully requested to reconsider and withdraw the present objections and rejections. Also, an early indication of allowability is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Michael J. Nickerson', with a stylized, flowing script.

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